

MAR 03 2015

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Email: [aamos@grrb.nt.ca](mailto:aamos@grrb.nt.ca)

Dear Ms. Amos:

**Request for Clarification, Species at Risk Committee (SARC) Status Report for Wolverine in the NWT**

Thank you for your letter of February 10, 2015, requesting clarification of the assessment of wolverine in the NWT. SARC reviewed your request and provides further clarification to each of your questions below.

**Request:**

“There is an inconsistency between traditional knowledge (TK) and scientific knowledge (SK) regarding breeding and birthing of wolverines. SK states that wolverines give birth between January and April, whereas TK states that wolverines give birth between June and July. The timing of birthing is important to know as climate change could significantly affect the amount of spring snow cover, which is stated in the report as being important for denning, constructing snow tunnels, protection from predators and thermoregulation for kits (TK and SK). If birthing is January-April (as suggested by SK) this is likely to have less of an impact than if birthing is June-July (as suggested by TK). More information needs to be gathered regarding birthing times and possible effects of climate change, and action taken accordingly.”

NORTHWEST TERRITORIES  
**SPECIES  
AT RISK**  
COMMITTEE

Further clarification from SARC: Under the *Species at Risk (NWT) Act*, SARC is required to consider, on an equal basis, information derived from scientific, traditional, and community knowledge. SARC believes it is important to consider each system of knowledge on its own merit and as such, prepares status reports in two components: a traditional and community knowledge component and a scientific knowledge component. SARC considers inconsistencies between the two components during the assessment.

In conducting the assessment, SARC did recognize the different breeding and birthing times identified in the scientific and traditional knowledge components. While the available information offered no insight into the cause of the difference in identified breeding times, the difference in birthing times may be because wolverines delay implantation of the blastocyst until several months after mating. Delayed implantation is an adaptation that allows female wolverines to time gestation and kit rearing with environmental conditions such as resource availability. The difference noted in breeding and birthing periods is not considered problematic by SARC as timing of breeding and birthing may differ among years, areas and between individuals. We concluded that this does not impede the assessment of wolverine in the NWT as a number of other ecological and behavioural factors of equal or greater significance to the wolverine's future status in the NWT were also considered.

SARC agrees that more information needs to be gathered regarding birthing times and possible effects of climate change; however, status reports are based on the best available traditional, community and scientific knowledge. This information was not readily available from literature sources or from the holders of the information. It is not SARC's role, nor is it within its capacity, to conduct primary research or to undertake any management actions.

**Request:**

"In both the TK and SK components of the report, populations of wolverine are frequently referred to as being somewhat dependent on caribou populations for food (barren-ground and mountain caribou are specifically mentioned whose status' are currently being assessed by the federal government). The reports states many times that caribou populations are decreasing in many areas, which could significantly affect wolverine populations. If caribou populations continue to decline, what are the long term implications for wolverine and how will this be assessed and addressed?"

Further clarification from SARC: No information was available to allow the examination of the long term implications of caribou declines on wolverines. While caribou are recognized as being an important food source, wolverines are also recognized as being generalist feeders, shifting between carrion/prey species depending on the season and availability. This generalist feeding strategy, and therefore the potential to adapt to caribou declines, was considered in assessing the species as not at risk.

If additional information becomes available that warrants revisiting the 2014 assessment of not at risk, then SARC can certainly conduct a re-assessment of wolverine.

**Request:**

"Is the December 2014 version posted on the web complete? On the bottom right corner of the page following the cover page it says "page i of 141". This is consistent on following pages "ii" through "xvi". Each says page x of 141. However, the next page is the start of the table of contents and on the bottom right corner it says "Page 1 of 154". Two pages later the section on Traditional and Community Knowledge



Component starts and in the bottom right corner it says "Page 1 of 154" again. Skip ahead to page 49. I cannot find it, nor can I find Page 50. The next page available to me is labelled Page 76 of 154". Is the posted version inaccurate, missing pages, or merely poorly formatted?"

Further clarification from SARC: The version posted to the website is complete; however, an error must have occurred during final formatting. The Secretariat has been made aware of this, and will correct the page numbering.

**Request:**

"On the page labelled "Page xiii of 141" in the scientific knowledge section it states that there is one population of wolverine and refers to COSEWIC 2014. My understanding is that this means the scientific community as it defines " 'population' is of the opinion that there is ONE population of wolverine in North America. Throughout the document there are a multitude of references to several 'populations' based on political boundaries. Which is it? Some clarification and consistency is needed when talking about wolverine and/or "populations" in the three provinces and three territories. On page labelled "Page vii of 141" in the TK section about Population it says "Wolverine populations in the Inuvialuit settlement region are thought to be stable." How many populations of wolverine are there in the ISR?"

Further clarification from SARC: Wolverines in Canada are considered part of a single Canadian designatable unit (population), as described by COSEWIC (2014). Designatable units are 'discrete and evolutionarily significant units of the taxonomic species'. Instances where the more general term 'populations' was used in the report tend to be used in the

vernacular sense; that is, to distinguish between wolverines in different jurisdictions and to refer to numbers of wolverine in a given area. In this context, wolverines in the ISR and the Gwich'in Settlement Area are part of the above-noted single Canadian population.

**Request:**

"On page labelled "Page iv of 141" in the section on positive influences the second item ends with "...away from major communities that are hard to access." What communities would these be?"

Further clarification from SARC: Report preparers are asked not only to synthesize best available information, but also, insofar as is possible, to analyze and comment on that information. In this case, "...away from major communities..." is the wording of the report preparer. Although no additional details were provided in the text regarding which major communities are being referred to, it appears as though this could safely apply to the capitals of the three territories (Whitehorse, Yellowknife, and Iqaluit).

**Request:**

"On page labelled "Page 3 of 154" in the section on description wolverines are described as having "...two whitish or golden stripes running along the sides and meeting above the tail to form a golden harp (Cardinal 2004)". This does not appear to be a direct quote of Cardinal. A picture of a wolverine on the same page shows only a single stripe on the side. I have seen a few wolverine myself but have never seen one with two stripes on the sides. On page labelled "Page 77 of 154" the wolverine is described as having a single stripe running laterally from each shoulder. Please clarify whether or not the TK sources said clearly that the wolverine has two stripes on the sides."

Further clarification from SARC: This is not intended to be a direct quote from Cardinal (2004); quotes are always contained within quotation marks in SARC status reports. This information was generally drawn from Cardinal (2004) and then put into the report preparer's own words. SARC does not believe that it was intended to be read as though wolverines have two stripes running laterally down each side of their body. Rather, we believe it should be read as though wolverines have two stripes (one stripe on each side of their body) that meet above the tail.

**Request:**

"On page labelled "Page 6 of 154: is Figure 2. In the section labelled "Legend" the fourth item is a box, with blank white content, labelled "Regional Boundaries" and the only white areas I see on the map are the high arctic islands. This does not seem correct."

Further clarification from SARC: 'Regional boundaries' in the legend is not meant to refer to the high arctic islands; rather, the legend indicates that regional boundaries on the map (delineating the Inuvialuit Settlement Region, the Gwich'in Settlement Area, etc.) are marked by dashed lines.

**Request:**

"On page labelled "Page 31 of 154" is Figure 5. In the text below the figure it refers to areas or red being superimposed on "...boundaries of trend information (represented in grey)". I guess the "...grey..." is meant to be 'grey' but I see no grey areas representing boundaries of trend information."

Further clarification from SARC: As indicated in the caption for Figure 5, the more detailed trend information is included in Figure 4. The grey area in Figure 5 is a general, non-shaded copy of the detailed trend



information in Figure 4. Thank you for drawing our attention to the spelling error in the Figure 5 caption. The Secretariat has been made aware of this and will work to correct it.

**Request:**

“On page labelled “Page 80 of 154” is Figure 9. The map seems to show that wolverine may or may not be present in most of Quebec and Labrador – this is an area labelled as “Unverified Observations”. However, it is not clear whether or not this large area was considered to be part of the historical range. The text on Continental Distribution does not enlighten me.”

Further clarification from SARC: Figure 9 is a reproduction of the map approved by COSEWIC for use in their most recent wolverine status report. The historic range of wolverines in North America was compiled from anecdotal evidence, including interpretation of fur returns. Unfortunately, the harvest locations of traded furs cannot be confidently assigned to the community at which they were traded, so the extent of the true historical range is unclear. ‘Unverified Observations’ accounts for areas where this uncertainty was particularly apparent.

I hope this satisfactorily addresses your questions and concerns.

Sincerely,



Dr. Paul Latour, Interim Chairperson  
Species at Risk Committee

- c. **Northwest Territories Species at Risk Committee**  
**Northwest Territories Conference of Management Authorities**  
**Kaytlin Cooper, Special Projects Biologist, Gwich'in Renewable**  
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